

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

AF/IFW



Inventor: Klaus HEILMANN et al.

Serial No.: 10/675,310

Filing Date: September 23, 2003

For: FILTER DEVICE

Art Unit: 1723

Examiner: Krishnan Menon

Confirmation No.: 5354

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Signature:

Thomas C. Hughes

TRANSMITTAL OF RESPONSE TO NOTIFICATION OF NON-COMPLIANT
APPEAL BRIEF PURSUANT TO 37 C.F.R. § 41.37

S I R:

Transmitted herewith for filing in the above-identified patent application is our Response to the Notice of Non-Compliant Appeal brief, dated December 19, 2006.

The Director is authorized to charge any fees or credit any overpayment in connection with this paper to Deposit Account 11-0600. A duplicate of this paper is attached for that purpose.

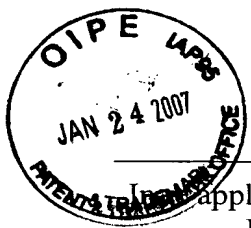
Respectfully submitted,
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Dated: January 19, 2006

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[2565/112]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

Application of:
Klaus HEILMANN et al.

Examiner: Krishnan Menon

For: FILTER DEVICE

Art Unit: 1723

Filed: September 29, 2003

Serial No.: 10/675,310

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**RESPONSE TO "NOTIFICATION OF
NON-COMPLIANT APPEAL BRIEF (37 CFR 41.37)**

SIR:

This paper is responsive to the "Notice of Non-Compliant Appeal Brief (37 CFR 41.37)" ("the Notice") dated December 19, 2006 in connection with the above-captioned application. The Notice contends that the Appeal Brief pursuant to 37 C.F.R. § 41.37 ("the Appeal Brief") submitted on November 14, 2006 does not comply with the requirements of 37 C.F.R. § 41.37(c)(1)(v). As indicated in M.P.E.P. § 1205.03, "[w]hen the Office holds the brief to be defective solely due to appellant's failure to provide a summary of the claimed subject matter as required by 37 CFR 41.37(c)(1)(v), an entire new brief need not, and should not, be filed." "Rather," according to M.P.E.P. § 1205.03, "a paper providing a summary of the claimed subject matter as required by 37 CFR 41.37(c)(1)(v) will suffice." While it is respectfully submitted that the section of the Appeal Brief captioned "Summary of Claimed Subject Matter" appearing on pages 3 to 4 fully comply with the requirements of 37 C.F.R. § 41.37(c)(1)(v), to facilitate matters, a replacement "Summary of Claimed Subject Matter" section is submitted herewith to replace the section of the Appeal Brief captioned "Summary of Claimed Subject Matter."

Please replace the section of the Appeal Brief captioned “Summary of Claimed Subject Matter” with the following replacement section:

--5. SUMMARY OF CLAIMED SUBJECT MATTER

An aspect of the present application relates to a filter device for mass exchange between two media separated by a membrane and an end cap for such a filter device. Specification, page 1, lines 2 to 4; page 2, line 30 to page 3, line 3. The end cap for the filter device includes a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap. Specification, page 8, lines 1 to 9; Figure 1. A portion of the channel adjacent to the interior chamber defines a fluid flow path in a first generally axial direction. Figures 1 and 8. The end cap further includes at least one member wherein the at least one member and the end cap are a single structural component. Specification, page 6, lines 11 to 14; Figures 8, 11 and 12. The at least one member extends away from an upper interior surface of the end cap that is adjacent to the channel in a direction that is the same as the first generally axial direction and is located within the interior chamber of the end cap. Specification, page 4, lines 27 to 31; page 10, lines 15 to 20; Figures 8, 11, 12. The at least one member defines, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction. Specification, page 4, lines 27 to 31; page 8, lines 1 to 6; page 11, lines 1 to 13; Figure 12. In accordance with an embodiment of the present application the at least one member is curved. Specification, page 10, lines 11 to 14; page 11, lines 1 to 7; Figures 11 and 12. In another embodiment the at least one member is configured to impart a circular motion to fluid exiting the channel and flowing into the interior chamber of the end cap. Specification, page 4, lines 27 to 31, page 11, lines 1 to 7; Figures 11 and 12. In yet another embodiment the end cap includes at least two members, respective portions of the members being spaced equidistantly relative to each other, the distance between the respective portions of adjacent members decreasing in the second direction of flow. Specification, page 11, lines 14 to 20; Figure 12. In yet another embodiment the filter device includes a casing for housing a filter element and the end cap is attachable to the casing. Specification, page 7, line 32 to page 8, line 6; Figure 1.

Another aspect of the present application relates to a hemodialyzer device. Specification, page 1, lines 1 to 7; page 2, line 24 to page 3, line 25; Figure 1. The hemodialyzer device includes a casing forming a housing, the casing having a blood outlet channel. Specification, page 7, line 32 to page 8, line 11; Figure 1. The hemodialyzer device also includes a hollow fiber bundle stored within the casing and an end cap attachable to the

casing. Id. The end cap includes a blood inlet channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap. Specification, page 8, lines 1 to 9; Figure 1. Additionally, the end cap of the hemodialyzer includes features as described above regarding the end cap for the filter device, including a plurality of curved members.

Another aspect of the present application relates to a method for filtering a fluid that includes the step of passing the fluid through a filter device. Specification, page 2, line 30 to page 6, line 28. The filter device includes features as described above.

Independent claim 55 relates to an end cap for a filter device. Specification, page 1, lines 2 to 4. The end cap for the filter device includes a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap. Specification, page 8, lines 1 to 9; Figure 1. A portion of the channel adjacent to the interior chamber defines a fluid flow path in a first generally axial direction. Figures 1 and 8. The end cap further includes at least one curved member wherein the at least one curved member and the end cap are a single structural component. Specification, page 6, lines 11 to 14; page 10, lines 11 to 14; page 11, lines 1 to 7; Figures 8, 11 and 12. The at least one member extends away from an upper interior surface of the end cap that is adjacent to the channel in a direction that is the same as the first generally axial direction and is located within the interior chamber of the end cap. Specification, page 4, lines 27 to 31; page 10, lines 15 to 20; Figures 8, 11, 12. The at least one curved member defines, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction. Specification, page 4, lines 27 to 31; page 8, lines 1 to 6; page 11, lines 1 to 13; Figure 12.

Independent claim 68 relates to an end cap for a filter device. Specification, page 1, lines 2 to 4. The end cap for the filter device includes a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap. Specification, page 8, lines 1 to 9; Figure 1. A portion of the channel adjacent to the interior chamber defines a fluid flow path in a first direction. Figures 1 and 8. The end cap further includes at least one member wherein the at least one member and the end cap are a single structural component. Specification, page 6, lines 11 to 14; Figures 8, 11 and 12. The at least one member located within the interior chamber of the end cap and extending away from an upper interior surface of the end cap that is adjacent to the channel in a direction that is the same as the first direction. Specification, page 4, lines 27 to 31; page 10, lines 15 to 20; Figures 8, 11, 12. The at least one member defines, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction

different from the first direction. Specification, page 4, lines 27 to 31; page 8, lines 1 to 6; page 11, lines 1 to 13; Figure 12. The end cap further includes at least two members, respective portions of the members being spaced equidistantly relative to each other, the distance between the respective portions of adjacent members decreasing in the second direction of flow. Specification, page 11, lines 14 to 20; Figure 12.

Independent claim 69 relates to a filter device. Specification, page 1, lines 2 to 4. The filter device includes a casing for housing a filter element and an end cap attachable to the casing. Specification, page 7, line 32 to page 8, line 6; Figure 1. The end cap includes a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap. Specification, page 8, lines 1 to 9; Figure 1. A portion of the channel adjacent to the interior chamber defines a fluid flow path in a first generally axial direction. Figures 1 and 8. The end cap further includes at least one curved member wherein the at least one curved member and the end cap are a single structural component. Specification, page 6, lines 11 to 14; page 10, lines 11 to 14; page 11, lines 1 to 7; Figures 8, 11 and 12. The at least one member extends away from an upper interior surface of the end cap that is adjacent to the channel in a direction that is the same as the first generally axial direction and is located within the interior chamber of the end cap. Specification, page 4, lines 27 to 31; page 10, lines 15 to 20; Figures 8, 11, 12. The at least one curved member defines, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction. Specification, page 4, lines 27 to 31; page 8, lines 1 to 6; page 11, lines 1 to 13; Figure 12.

Independent claim 82 relates to a filter device. Specification, page 1, lines 2 to 4. The filter device includes a casing for housing a filter element and an end cap attachable to the casing. Specification, page 7, line 32 to page 8, line 6; Figure 1. The end cap includes a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap. Specification, page 8, lines 1 to 9; Figure 1. A portion of the channel adjacent to the interior chamber defines a fluid flow path in a first direction. Figures 1 and 8. The end cap further includes at least one member wherein the at least one member and the end cap are a single structural component. Specification, page 6, lines 11 to 14; Figures 8, 11 and 12. The at least one member located within the interior chamber of the end cap and extending away from an upper interior surface of the end cap that is adjacent to the channel in a direction that is the same as the first direction. Specification, page 4, lines 27 to 31; page 10, lines 15 to 20; Figures 8, 11, 12. The at least one member defines, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a

second direction different from the first direction. Specification, page 4, lines 27 to 31; page 8, lines 1 to 6; page 11, lines 1 to 13; Figure 12. The end cap further includes at least two members, respective portions of the members being spaced equidistantly relative to each other, the distance between the respective portions of adjacent members decreasing in the second direction of flow. Specification, page 11, lines 14 to 20; Figure 12.

Independent claim 83 relates to an end cap for a filter device. Specification, page 1, lines 2 to 4. The end cap for the filter device includes a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap. Specification, page 8, lines 1 to 9; Figure 1. The end cap further includes at least one member wherein the at least one member and the end cap are a single structural component. Specification, page 6, lines 11 to 14; Figures 8, 11 and 12. The at least one member extends away from an upper interior surface of the end cap that is adjacent to the channel in a generally axial direction and located within the interior chamber of the end cap. Specification, page 4, lines 27 to 31; page 10, lines 15 to 20; Figures 8, 11, 12. The at least one member is configured to impart a circular motion to fluid exiting the channel and flowing into the interior chamber of the end cap. Specification, page 4, lines 27 to 31, page 11, lines 1 to 7; Figures 11 and 12.

Independent claim 96 relates to an end cap for a filter device. Specification, page 1, lines 2 to 4. The end cap includes a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap in a first direction. Specification, page 8, lines 1 to 9; Figures 1 and 8. The end cap further includes at least one member wherein the at least one member and the end cap are a single structural component. Specification, page 6, lines 11 to 14; Figures 8, 11 and 12. The at least one member located within the interior chamber of the end cap and extending away from an upper interior surface of the end cap that is adjacent to the channel in a direction that is the same as the first direction. Specification, page 4, lines 27 to 31; page 10, lines 15 to 20; Figures 8, 11, 12. The at least one member is configured to impart a circular motion to fluid exiting the channel and flowing into the interior chamber of the end cap. Specification, page 4, lines 27 to 31, page 11, lines 1 to 7; Figures 11 and 12. The end cap further includes at least two members, respective portions of the members being spaced equidistantly relative to each other, the distance between the respective portions of adjacent members decreasing in the second direction of flow. Specification, page 11, lines 14 to 20; Figure 12.

Independent claim 97 relates to a filter device. Specification, page 1, lines 2 to 4. The filter device includes a casing for housing a filter element and an end cap

attachable to the casing. Specification, page 7, line 32 to page 8, line 6; Figure 1. The end cap includes a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap. Specification, page 8, lines 1 to 9; Figure 1. The channel defines a fluid flow path in a first generally axial direction. Figures 1 and 8. The end cap further includes at least one member wherein the at least one member and the end cap are a single structural component. Specification, page 6, lines 11 to 14; Figures 8, 11 and 12. The at least one member located within the interior chamber of the end cap and extending away from an upper interior surface of the end cap that is adjacent to the channel in a direction that is the same as the first generally axial direction and located within the interior chamber of the end cap. Specification, page 4, lines 27 to 31; page 10, lines 15 to 20; Figures 8, 11, 12. The at least one member is configured to impart a circular motion to fluid exiting the channel and flowing into the interior chamber of the end cap. Specification, page 4, lines 27 to 31, page 11, lines 1 to 7; Figures 11 and 12.

Independent claim 109 relates to a filter device. Specification, page 1, lines 2 to 4. The end cap includes a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap. Specification, page 8, lines 1 to 9; Figure 1. The channel defines a fluid flow path in a first direction. Figures 1 and 8. The end cap further includes at least one member wherein the at least one member and the end cap are a single structural component. Specification, page 6, lines 11 to 14; Figures 8, 11 and 12. The at least one member located within the interior chamber of the end cap and extending away from an upper interior surface of the end cap that is adjacent to the channel in a direction that is the same as the first direction. Specification, page 4, lines 27 to 31; page 10, lines 15 to 20; Figures 8, 11, 12. The at least one member is configured to impart a circular motion to fluid exiting the channel and flowing into the interior chamber of the end cap. Specification, page 4, lines 27 to 31, page 11, lines 1 to 7; Figures 11 and 12. The end cap further includes at least two members, respective portions of the members being spaced equidistantly relative to each other, the distance between the respective portions of adjacent members decreasing in the second direction of flow. Specification, page 11, lines 14 to 20; Figure 12.

Independent claim 110 relates to a hemodialyzer device. Specification, page 1, lines 1 to 7; page 2, line 24 to page 3, line 25; Figure 1. The hemodialyzer device includes a casing forming a housing, the casing having a blood outlet channel. Specification, page 7, line 32 to page 8, line 11; Figure 1. The hemodialyzer device also includes a hollow fiber bundle stored within the casing and an end cap attachable to the casing. Id. The end cap includes a blood inlet channel providing fluid communication from an exterior of the end cap

to an interior chamber of the end cap. Specification, page 8, lines 1 to 9; Figure 1. The channel defines a fluid flow path in a first generally axial direction. Figures 1 and 8. The end cap further includes a plurality of curved members wherein the plurality of curved members and the end cap are a single structural component. Specification, page 6, lines 11 to 14; page 10, lines 11 to 14; page 11, lines 1 to 7; Figures 8, 11 and 12. The plurality of curved members extend away from an upper interior surface of the end cap that is adjacent to the channel in a direction that is the same as the first generally axial direction and is located within the interior chamber of the end cap. Specification, page 4, lines 27 to 31; page 10, lines 15 to 20; Figures 8, 11, 12. The at least one member defines, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction. Specification, page 4, lines 27 to 31; page 8, lines 1 to 6; page 11, lines 1 to 13; Figure 12.

Independent claim 120 relates to a hemodialyzer device. Specification, page 1, lines 1 to 7; page 2, line 24 to page 3, line 25; Figure 1. The hemodialyzer device includes a casing forming a housing, the casing having a blood outlet channel. Specification, page 7, line 32 to page 8, line 11; Figure 1. The hemodialyzer device also includes a hollow fiber bundle stored within the casing and an end cap attachable to the casing. Id. The end cap includes a blood inlet channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap. Specification, page 8, lines 1 to 9; Figure 1. The channel defines a fluid flow path in a first direction. Figures 1 and 8. The end cap further includes a plurality of curved members wherein the plurality of curved members and the end cap are a single structural component. Specification, page 6, lines 11 to 14; page 10, lines 11 to 14; page 11, lines 1 to 7; Figures 8, 11 and 12. The plurality of curved members located within the interior chamber of the end cap and extending away from an upper interior surface of the end cap that is adjacent to the channel in a direction that is the same as the first direction. Specification, page 4, lines 27 to 31; page 10, lines 15 to 20; Figures 8, 11, 12. The at least one member defines, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction. Specification, page 4, lines 27 to 31; page 8, lines 1 to 6; page 11, lines 1 to 13; Figure 12. Respective portions of the plurality of curved members are spaced equidistantly relative to each other, the distance between the respective portions of adjacent members decreasing in the second direction of flow. Specification, page 11, lines 14 to 20; Figure 12.

Independent claim 121 relates to a method for filtering a fluid that includes the step of passing the fluid through a filter device. Specification, page 2, line 30 to page 6, line

28. The filter device includes a casing for housing a filter element and an end cap attachable to the casing. Specification, page 7, line 32 to page 8, line 6; Figure 1. The end cap includes a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap. Specification, page 8, lines 1 to 9; Figure 1. A portion of the channel adjacent to the interior chamber defines a fluid flow path in a first generally axial direction. Figures 1 and 8. The end cap further includes at least one curved member wherein the at least one curved member and the end cap are a single structural component. Specification, page 6, lines 11 to 14; page 10, lines 11 to 14; page 11, lines 1 to 7; Figures 8, 11 and 12. The at least one curved member extends away from an upper interior surface of the end cap that is adjacent to the channel in a direction that is the same as the first generally axial direction and is located within the interior chamber of the end cap, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction. Specification, page 4, lines 27 to 31; page 8, lines 1 to 6; page 10, lines 15 to 20; page 11, lines 1 to 13; Figures 8, 11, 12.

Independent claim 124 relates to a method for filtering a fluid that includes the step of passing the fluid through a filter device. Specification, page 2, line 30 to page 6, line 28. The filter device includes a casing for housing a filter element and an end cap attachable to the casing. Specification, page 7, line 32 to page 8, line 6; Figure 1. The end cap includes a channel providing fluid communication in a generally axial direction from an exterior of the end cap to an interior chamber of the end cap. Specification, page 8, lines 1 to 9; Figure 1 and 8. The end cap further includes at least one member defined by an interior surface of, and located within, the interior chamber of the end cap, the interior surface being adjacent to the channel, the at least one member forming part of the end cap wherein the at least one member and the end cap are a single structural component. Specification, page 4, lines 27 to 31; page 6, lines 11 to 14; page 10, lines 15 to 20; Figures 8, 11 and 12. The at least one member is configured to impart a circular motion to fluid exiting the channel and flowing into the interior chamber of the end cap. Specification, page 4, lines 27 to 31, page 11, lines 1 to 7; Figures 11 and 12.--

It is believed and respectfully submitted that the foregoing replacement section fully complies with the requirements of 37 C.F.R. § 41.37(c)(1)(v) and that the Appeal Brief now fully complies with all of the requirements of 37 C.F.R. § 41.37.

In view of all of the foregoing and for all of the reasons more fully set forth in the Appeal Brief, reversal of all of the rejections set forth in the Final Office Action dated June 16, 2006 is respectfully requested.

Respectfully submitted,

Dated: Jan. 19, 2007

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